# OCCUPATIONAL INJURIES AND DISEASES IN **ALBERTA**

Lost-Time Cla

## Young Worke

2001 to 200

Released July 2006

WORK SAFE ALBERTA

Alberta Human Resources and Employment

*Building Alberta's Workforce*

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# HIGHLIGHTS

## From 2001 to 2005...

- There were 36,639 lost-time claims from young workers aged 15 to 24. Of those, more than 80% involved the Wholesale and Retail, Construction and Construction Trade Services, Manufacturing, Processing and Packaging and Business, Personal and Professional Service sectors.
- Sprains, strains and tears were the primary nature of injury, accounting for 41.1% of the total lost-time claims.
- The trunk was the most common body part injured, representing 31.7% of the total claims.
- Twenty percent of incident types involved overexertion, while being struck by objects accounted for 19.0% of all claims.
- Forty-eight percent of claims resulted in between one and five days off work.

## In 2005...

- The Workers' Compensation Board (WCB) – Alberta accepted 7,173 lost-time claims from young workers aged 15 to 24, representing 20.2% of all lost-time claims in the province.
- The median workdays lost was five days, two days fewer than the provincial average of seven days.
- More than one-third of lost-time claims occurred in sales and service occupations.
- WCB accepted nine occupational fatalities for compensation from young workers, representing 6.3% of all workplace fatalities accepted in Alberta.

# INTRODUCTION

## Role of Alberta Human Resources and Employment

Alberta Human Resources and Employment (AHRE) provides a continuum of services and information to support the development of a skilled and productive labour force; fair, safe, healthy and productive workplaces; and helping improve the well-being of Albertans. AHRE develops and delivers programs and services that contribute to workplaces for employees and employers by:

- working with industry and safety associations to audit and certify health and safety programs
- helping employers, employees, unions and industry associations work together by offering facilitation services, workshops and partnership opportunities
- developing and maintaining policy and legislated employment standards in Alberta
- preparing and providing ongoing support of Alberta's workplace health and safety regulations
- explaining legislated standards under the *Occupational Health and Safety Act* and the *Employment Standards Code* and ensuring compliance through complaint resolution, investigation and targeted inspections.

## Occupational Injuries and Diseases of Young Workers 2001 to 2005

Each year, AHRE prepares a report on the occupational injuries and diseases of young workers in Alberta. The purpose of this report is to provide government, employers, workers, and health and safety professionals with information about key health and safety issues concerning young workers.

This report includes:

- characteristics of injured workers aged 15 to 24
- general descriptive information about the injuries and diseases
- occupational fatalities accepted by the WCB for compensation from young workers.

## Notes about this report:

- This report presents 2005 data beside 2004 data to help with comparisons. Additional historical data are presented where possible.

- Throughout the report, the lost-time claim rate is the number of claims per 100 person-years, and the duration rate is the number of days lost per 100 person-years.

- In 2005, improvements have been made to the data collection. A stricter definition of a lost-time claim has been adopted and applied to the data covering the period 2001 to 2005. Previously, a small proportion of modified-work claims were also captured as lost-time.

- Improvements have also been made in the analysis by workers occupation. The 2001 National Occupation Classification (NOC) has been adopted for the presentation of figures by occupation. The NOC 2001 provides a standardized framework reflecting the Canadian labour market. For further information please see http://www23.hrdc-drhc.gc.ca/2001/e/generic/welcome.shtml

- Terms, definitions and formulas are described in Appendix A. Industry codes are listed in Appendix B.

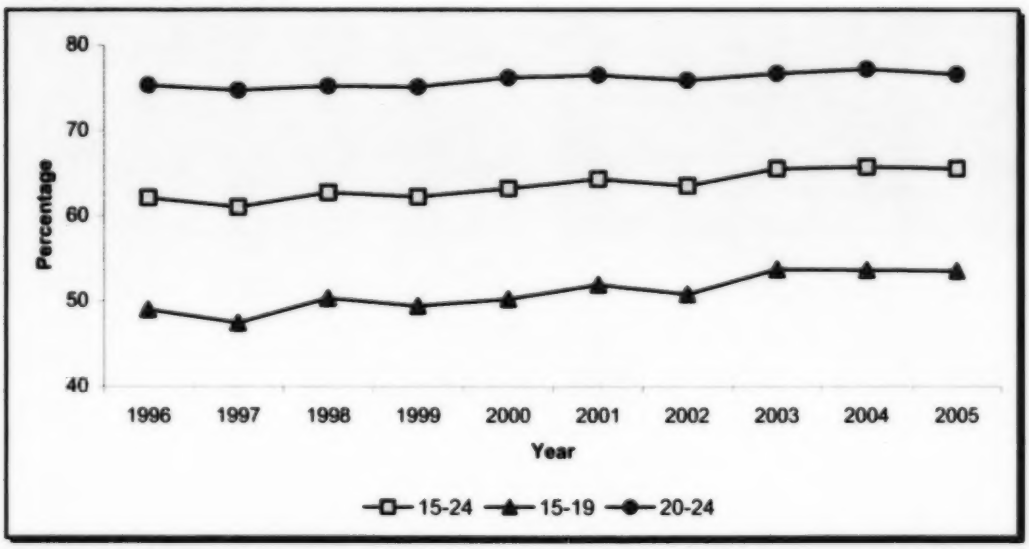
SECTION 2

# CHARACTERISTICS OF INJURED WORKERS

## In 2005, young workers represented 17.5% of those employed in Alberta and accounted for 20.4% of the total lost-time claims.

Work is a common activity for many young people in Alberta. Employment rates for youth aged 15 to 24 have been steadily increasing since 1995. In 2005, the employment rate for youth was 65.5% (see Chart 2.0A).

**Chart 2.0A**
**Employment Rate Trends for Youth Aged 15 to 24 - Alberta: 1996-2005**

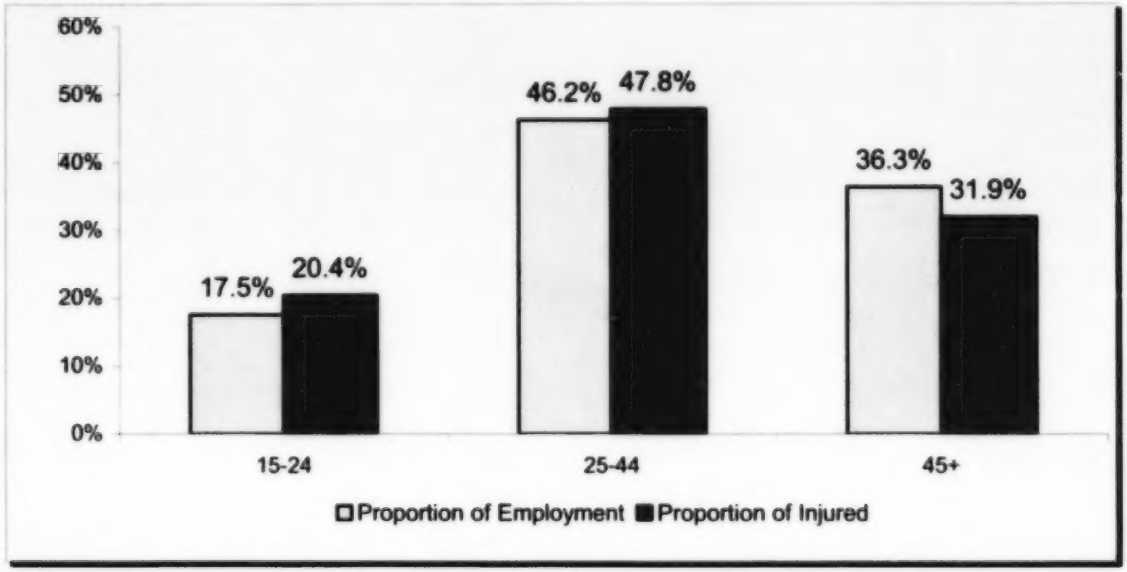



Data Source: Statistics Canada's Labour Force Survey (2005 Historical Review), Prepared by Data Development and Evaluation

Compared to older workers, young workers are more likely to be injured. In 2005, young workers accounted for 17.5% of those employed in Alberta and accounted for 20.4% of the total lost-time claims. In contrast, workers aged 45 and older represented 36.3% of those employed and had 31.9% of the total lost-time claims (see Chart 2.0B).

Workers aged 25 to 44 showed similar trends as young workers: 46.2% of those employed in 2005 were between the ages of 25 and 44, and 47.8% of all lost-time claims were from workers of this age group.

**Chart 2.0B**
**Proportion of Employment versus Proportion of Injured Workers, by Age Group - Alberta: 2005**




Data Source: Statistics Canada's Labour Force Survey (2005 Historical Review) and WCB 2005 Data, Prepared by Data Development and Evaluation

In 2005, there were 7,173 lost-time claims from young workers aged 15 to 24, an increase of 3.3% from 2004 (see Table 2.0).

The median days lost shows the severity of the effects of occupational injury and disease. In 2005, the median days lost due to injuries or diseases for young workers was five days, two days fewer than the provincial median days lost of seven.

**Table 2.0**
**Lost-Time Claims of Young Workers - Alberta: 2001-2005**

| Year | Cost of Claims | Days Lost | Median Days Lost | Lost-Time Claims |
|---|---|---|---|---|
| 2001 | $19,185,170 | 159,157 | 6 | 8,135 |
| 2002 | $19,136,498 | 144,851 | 6 | 7,362 |
| 2003 | $21,217,517 | 130,416 | 6 | 7,023 |
| 2004 | $20,579,260 | 116,512 | 5 | 6,946 |
| **2005** | **$21,666,266** | **110,372** | **5** | **7,173** |

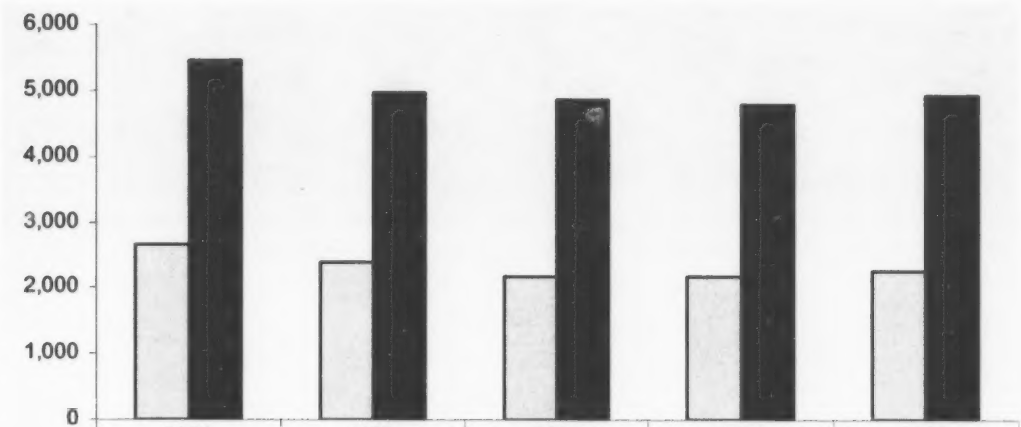
Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

## 2.1 Lost-Time Claims by Age

From 2001 to 2005, there were 36,639 lost-time claims from young workers aged 15 to 24. More than two-thirds of these claims were from workers aged 20 to 24. Workers aged 15 to 19 years accounted for 31.8% of the total claims from young workers. Young workers aged 15 to 19 represented 39.5% of all workers aged 15 to 24 while those aged 20 to 24 accounted for 60.5%.

In 2005, both age groups experienced an increase in their lost-time claims. Workers aged 15 to 19 had 2,252 lost-time claims and workers of 20 to 24 years of age had 4,921 claims (see Chart 2.1).

**Chart 2.1**
**Lost-Time Claims by Age - Alberta: 2001-2005**




| | 2001 | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|---|
| □15-19 | 2,674 | 2,385 | 2,164 | 2,179 | 2,252 |
| ■20-24 | 5,461 | 4,977 | 4,859 | 4,767 | 4,921 |

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

## 2.2 Lost-Time Claims by Gender

More claims from young workers were from men than women. Between 2001 and 2005, 70.4% of claims involved men. Lost-time claims from women accounted for 26.9% of all claims (see Table 2.2). Over this same period, men accounted for approximately 52% of those in employment among young workers, while women made up approximately 48%. In 2005, the number or lost-time claims from men increased by 2.0% while the number of lost-time claims from women increased by 7.5%. For workers of all ages, men accounted for 66.3% of claims from workers of all ages between 2001 and 2005 while women accounted for 32.1%.

**Table 2.2**
**Lost-Time Claims by Gender - Young Workers, Alberta: 2001-2005**

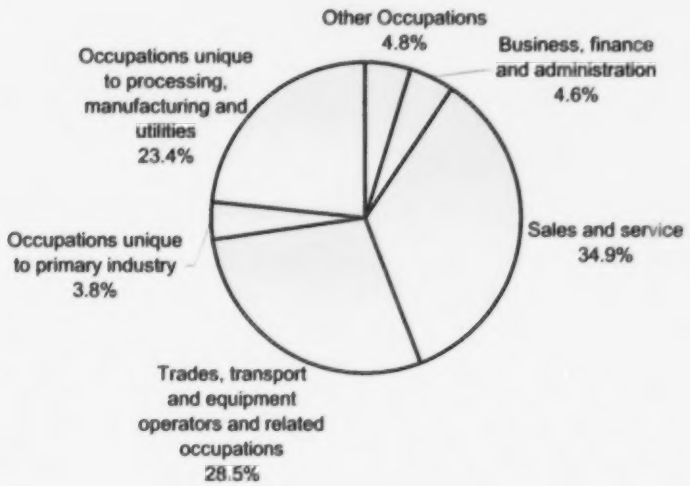
| | | | | | | Total | |
|---|---|---|---|---|---|---|---|
| **Gender** | **2001** | **2002** | **2003** | **2004** | **2005** | **Lost-Time Claims** | **%** |
| Men | 5,857 | 5,172 | 4,994 | 4,336 | **4,931** | 25,790 | 70.4% |
| Women | 2,026 | 1,985 | 1,802 | 1,942 | **2,088** | 9,843 | 26.9% |
| Unspecified | 252 | 205 | 227 | 168 | **154** | 1,006 | 2.7% |
| **Total** | **8,135** | **7,362** | **7,023** | **6,946** | **7,173** | **36,639** | **100.0%** |

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

## 2.3 Lost-Time Claims by Occupation[1]

In 2005, young workers aged 15 to 19 in the sales and service occupations accounted for 34.9% of total claims followed by trades, transport and equipment operators and related occupations at 28.5% (see Chart 2.3A).

### Chart 2.3A
### Lost-Time Claims by Occupation - Young Workers Aged 15-19, Alberta: 2005




Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

[1] Occupations were coded following the *National Occupational Classification for Statistics 2001*. See page 2 for further information.

In 2005, young workers aged 20 to 24 in the trades, transport and equipment operators and related occupations accounted for 36.9% claims from workers aged 20-24 while sales and service occupations accounted for 22.0% (see Chart 2.3B).

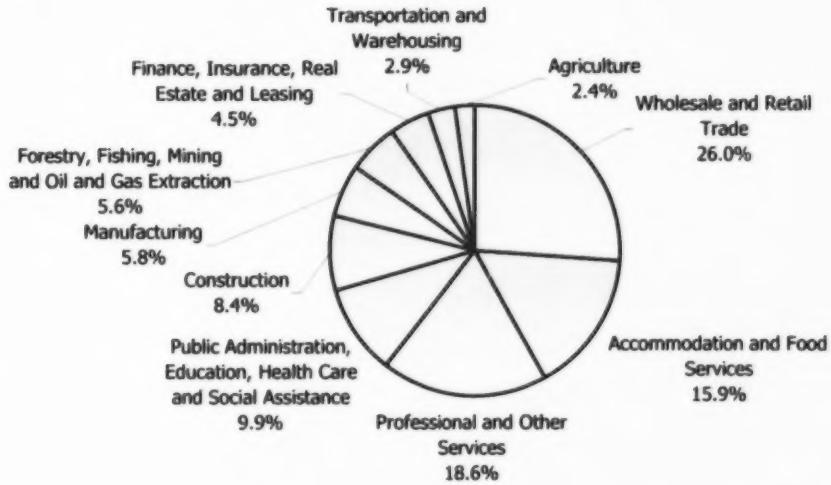
**Chart 2.3B**
**Lost-Time Claims by Occupation - Young Workers Aged 20-24, Alberta: 2005**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

## 2.4 Lost-Time Claims by Industry Sector

In 2005, more than 60.5% of young workers aged 15 to 24 were employed in the Wholesale and Retail Trade, Accommodation and Food Services, and Professional and Other Services sectors[2]. The largest share of young workers was in the Wholesale and Retail Trade sector, at 26.0% (see Chart 2.4A).

**Chart 2.4A**
**Industry Sectors in which Young Workers are Employed - Alberta: 2005**


Transportation and Warehousing 2.9%
Agriculture 2.4%
Finance, Insurance, Real Estate and Leasing 4.5%
Wholesale and Retail Trade 26.0%
Forestry, Fishing, Mining and Oil and Gas Extraction 5.6%
Manufacturing 5.8%
Construction 8.4%
Public Administration, Education, Health Care and Social Assistance 9.9%
Accommodation and Food Services 15.9%
Professional and Other Services 18.6%

Data Source: Statistics Canada's Labour Force Survey (2005 Historical Review), Prepared by Data Development and Evaluation

[2] These are the industry categories used by the *North American Industry Classification System (NAICS)* and regrouped to make them more presentable in this pie chart. They are different from the categories used by the WCB, which are presented in Table 2.4B.

Between 2001 and 2005, four industry sectors accounted for more than 80% of the injury claims from young workers. Retail and Wholesale led with 9,699, representing 26.5% of all claims. Construction and Construction Trade Services, Manufacturing, Processing and Packaging, and Business, Personal and Professional Services accounted for 19.3%, 18.3% and 16.9% of claims respectively (see Table 2.4B).

**Table 2.4B**
**Lost-Time Claims by Industry Sector - Young Workers, Alberta: 2001-2005**

| | | | | | | Total | |
|---|---|---|---|---|---|---|---|
| **Industry Sector** | **2001** | **2002** | **2003** | **2004** | **2005** | **Lost-Time Claims** | **%** |
| Agriculture and Forestry | 113 | 133 | 85 | 63 | **65** | 459 | 1.3% |
| Business, Personal and Professional Services | 1,320 | 1,191 | 1,148 | 1,231 | **1,315** | 6,205 | 16.9% |
| Construction and Construction Trade Services | 1,449 | 1,497 | 1,457 | 1,287 | **1,379** | 7,069 | 19.3% |
| Manufacturing, Processing and Packaging | 1,804 | 1,308 | 1,194 | 1,170 | **1,215** | 6,691 | 18.3% |
| Mining and Petroleum Development | 274 | 167 | 250 | 198 | **264** | 1,153 | 3.1% |
| Public Administration, Education and Health Services | 529 | 565 | 560 | 593 | **559** | 2,806 | 7.7% |
| Transportation, Communication and Utilities | 623 | 531 | 464 | 446 | **474** | 2,538 | 6.9% |
| Wholesale and Retail | 2,016 | 1,963 | 1,863 | 1,957 | **1,900** | 9,699 | 26.5% |
| Unspecified | 7 | 7 | 2 | 1 | **2** | 19 | 0.1% |
| **Total** | **8,135** | **7,362** | **7,023** | **6,946** | **7,173** | **36,639** | **100.0%** |

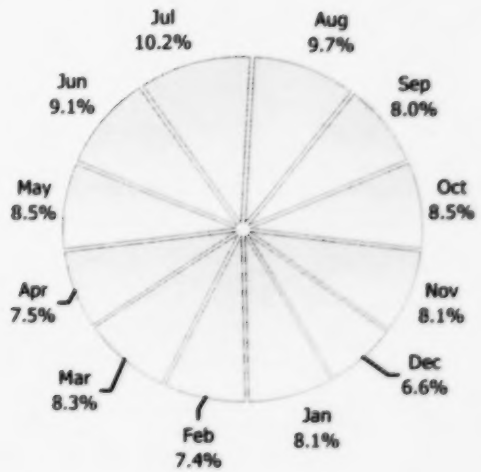
Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

## 2.5 Lost-Time Claims by Month of Injury

Lost-time claims from workers aged 15 to 24 were approximately evenly distributed in twelve months between 2001 and 2005 (see Chart 2.5A). There was a slight increase in the number of injuries occurring to young workers during the summer months.

July and August had the most injuries, accounting for 10.2% and 9.7% of total claims respectively. This increase in the number of claims is likely due to an increased number of young workers in the labour force during the summer months. From 2001 to 2005, young workers accounted for approximately 19% of total employment in both July and August, while young workers typically account for approximately 16% to 17% of total employment in other months.

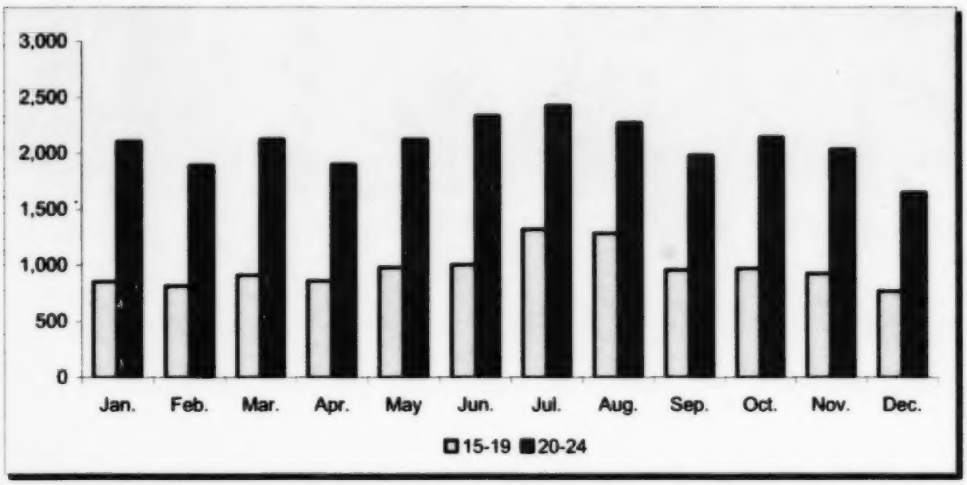
**Chart 2.5A**
**Lost-Time Claims by Month of Injury - Young Workers, Alberta: 2001-2005**




Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

Workers aged 20 to 24 and those aged 15 to 19 show similar patterns in terms of the month of injury. Both groups had most of the injuries in June, July and August (see Chart 2.5B). Claims from workers aged 25 years and over do not share this trend.

**Chart 2.5B**
**Lost-Time Claims by Month of Injury - Young Workers, Alberta: 2001 - 2005**




Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

SECTION 3

# INJURY AND DISEASE ANALYSIS

**Overexertion was the most common cause for lost-time claims. Sprains, strains and tears continued to be the leading nature of injury with the trunk being the most commonly injured body part.**

## 3.1 Nature of Injury or Disease

Nature of injury is used to identify the physical characteristics of the injury or disease. For workers of all ages, traumatic injuries and disorders accounted for 90.9% of all claims between 2001 and 2005. The most common injuries were sprains, strains and tears, 47.6%; surface wounds and bruises, 11.5%; open wounds, 9.2%; and fractures and dislocations, 8.9%.

Young workers experienced similar injuries over this time. Between 2001 and 2005, 91.9% of all the lost-time claims from young workers were caused by traumatic injuries and disorders. The three most common traumatic injuries and disorders were: sprains, strains and tears, 41.1%; open wounds, 14.5%; and surface wounds and bruises, 12.8% (see Table 3.1).

## Table 3.1
## Nature of Injury or Disease - Young Workers, Alberta: 2001-2005

| Nature of Injury or Disease | 2001 | 2002 | 2003 | 2004 | 2005 | Total Number | Total % |
|---|---|---|---|---|---|---|---|
| **Traumatic Injuries and Disorders** | **7,428** | **6,701** | **6,446** | **6,403** | **6,682** | **33,660** | **91.9%** |
| Sprains, Strains and Tears | 3,329 | 3,095 | 2,916 | 2,805 | 2,921 | 15,066 | 41.1% |
| Open Wounds | 1,237 | 1,025 | 1,019 | 973 | 1,046 | 5,300 | 14.5% |
| Surface Wounds and Bruises | 1,033 | 911 | 857 | 924 | 965 | 4,690 | 12.8% |
| Fractures and Dislocations | 706 | 687 | 613 | 637 | 637 | 3,280 | 9.0% |
| Burns | 394 | 312 | 338 | 327 | 378 | 1,749 | 4.8% |
| Other Traumatic Injuries and Diseases | 729 | 671 | 703 | 737 | 735 | 3,575 | 9.8% |
| **Systemic Diseases and Disorders** | **333** | **242** | **246** | **250** | **232** | **1,303** | **3.6%** |
| **Symptoms, Signs and Ill-Defined Conditions** | **19** | **20** | **22** | **15** | **24** | **100** | **0.3%** |
| **Other Diseases, Conditions and Disorders** | **18** | **6** | **7** | **9** | **14** | **54** | **0.1%** |
| **Infectious and Parasitic Diseases** | **4** | **5** | **6** | **2** | **2** | **19** | **0.1%** |
| **Multiple Diseases, Conditions and Disorders** | **1** | **2** | **4** | **0** | **2** | **9** | **<0.1%** |
| **Nature of Injury - Unknown** | **332** | **386** | **292** | **267** | **217** | **1,494** | **4.1%** |
| **Total** | **8,135** | **7,362** | **7,023** | **6,946** | **7,173** | **36,639** | **100.0%** |

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

## 3.2 Part of Body Injured

For workers of all ages, injuries to the trunk accounted for 38.6% of all lost-time claims between 2001 and 2005. Over the same period, 31.7% of claims from young workers were due to injuries to the trunk, followed by upper extremities at 31.1% and lower extremities at 21.5%. The most common trunk injury was to the back, including spine and spinal cord, representing 21.8% of total lost-time claims from young workers (see Table 3.2) and 26.0% of claims from workers of all ages. Workers of all ages were less likely to sustain injuries to the upper extremities and lower extremities as these injuries accounted for 23.8% and 19.8% of all claims between 2001 and 2005.

### Table 3.2
### Part of Body Injured - Young Workers, Alberta: 2001-2005

| | | | | | | Total | |
|---|---|---|---|---|---|---|---|
| **Part of Body Injured** | **2001** | **2002** | **2003** | **2004** | **2005** | **Number** | **%** |
| **Trunk** | **2,615** | **2,374** | **2,222** | **2,204** | **2,191** | **11,606** | **31.7%** |
| Back, Including Spine, Spinal Cord | 1,818 | 1,620 | 1,546 | 1,505 | 1,490 | 7,979 | 21.8% |
| Other Trunk | 797 | 754 | 676 | 699 | 701 | 3,627 | 9.9% |
| **Upper Extremities** | **2,642** | **2,245** | **2,158** | **2,129** | **2,236** | **11,410** | **31.1%** |
| Finger(s), Fingernail(s) | 1,100 | 950 | 819 | 841 | 920 | 4,630 | 12.6% |
| Wrist(s) and Hand(s) Except Finger(s) | 1,058 | 875 | 923 | 847 | 897 | 4,600 | 12.6% |
| Other Upper Extremities | 484 | 420 | 416 | 441 | 419 | 2,180 | 5.9% |
| **Lower Extremities** | **1,698** | **1,605** | **1,475** | **1,493** | **1,596** | **7,867** | **21.5%** |
| Ankle(s) and Foot (Feet) Except Toes | 863 | 831 | 776 | 745 | 759 | 3,974 | 10.8% |
| Leg(s) | 690 | 662 | 562 | 640 | 709 | 3,263 | 8.9% |
| Other Lower Extremities | 145 | 112 | 137 | 108 | 128 | 630 | 1.7% |
| **Head** | **620** | **530** | **596** | **603** | **637** | **2,986** | **8.1%** |
| Eye(s) | 292 | 219 | 268 | 261 | 278 | 1,318 | 3.6% |
| Other Head Parts | 328 | 311 | 328 | 342 | 359 | 1,668 | 4.6% |
| **Multiple Body Parts** | **344** | **415** | **401** | **356** | **345** | **1,861** | **5.1%** |
| **Neck, Including Throat** | **158** | **138** | **124** | **121** | **125** | **666** | **1.8%** |
| **Body Systems** | **41** | **31** | **27** | **26** | **31** | **156** | **0.4%** |
| **Other Body Parts** | **0** | **0** | **0** | **0** | **2** | **2** | **<0.1%** |
| **Part of Body - Unknown** | **17** | **24** | **20** | **14** | **10** | **85** | **0.2%** |
| **Total** | **8,135** | **7,362** | **7,023** | **6,946** | **7,173** | **36,639** | **100.0%** |

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

## 3.3 Source of Injury or Disease

Source of injury or disease describes the object or substance that the worker came into contact with that resulted in an injury or disease. Four primary sources of injury accounted for more than half of the total lost-time claims from young workers from 2001 to 2005. Persons, plants, animals and minerals accounted for 18.3%; parts and materials and structures and surfaces, each represented 12.7% and 12.9% respectively; and containers accounted for 11.5% of all claims from young workers (see Table 3.3). Injuries to workers of all ages came from similar sources although these same four sources accounted for 61.8% of claims.

**Table 3.3**
**Source of Injury or Disease - Young Workers, Alberta: 2001-2005**

| | | | | | | Total | |
|---|---|---|---|---|---|---|---|
| **Source of Injury or Disease** | **2001** | **2002** | **2003** | **2004** | **2005** | **Number** | **%** |
| **Persons, Plants, Animals and Minerals** | **1,311** | **1,337** | **1,360** | **1,322** | **1,389** | **6,719** | **18.3%** |
| Person - Injured Worker | 892 | 981 | 962 | 934 | 951 | 4,720 | 12.9% |
| Person - Other Than Injured or Ill Worker [1] | 183 | 166 | 200 | 196 | 224 | 969 | 2.6% |
| Minerals - Metallic or Nonmetallic (except fuel) | 31 | 24 | 25 | 24 | 32 | 136 | 0.4% |
| Other Persons, Plants, Animals and Minerals | 205 | 166 | 173 | 168 | 182 | 894 | 2.4% |
| **Parts and Materials** | **1,075** | **875** | **902** | **867** | **925** | **4,644** | **12.7%** |
| **Structures and Surfaces** | **950** | **950** | **944** | **923** | **967** | **4,734** | **12.9%** |
| **Containers [2]** | **977** | **808** | **803** | **786** | **850** | **4,224** | **11.5%** |
| **Tools, Instruments and Equipment** | **680** | **540** | **574** | **594** | **620** | **3008** | **8.2%** |
| Hand tools - Powered | 98 | 74 | 91 | 83 | 108 | 454 | 1.2% |
| Hand tools - Non powered | 458 | 345 | 369 | 381 | 391 | 1,944 | 5.3% |
| Other Tools and Equipments | 124 | 121 | 114 | 130 | 121 | 610 | 1.7% |
| **Machinery** | **673** | **552** | **500** | **555** | **592** | **2,872** | **7.8%** |
| **Vehicles** | **565** | **508** | **534** | **490** | **464** | **2,561** | **7.0%** |
| **Furniture and Fixtures** | **241** | **255** | **220** | **242** | **224** | **1,182** | **3.2%** |
| **Chemicals and Chemical Products** | **116** | **63** | **88** | **84** | **110** | **461** | **1.3%** |
| **Source of Injury - Unknown** | **1,235** | **1,166** | **722** | **715** | **657** | **4,495** | **12.3%** |
| **Other Sources** | **312** | **308** | **376** | **368** | **375** | **1,739** | **4.7%** |
| **Total** | **8,135** | **7,362** | **7,023** | **6,946** | **7,173** | **36,639** | **100.0%** |

[1] Person – other than injured or ill worker: classifies injuries or illnesses inflicted by family members as well as non-family relations, including co-workers, former co-workers, and patients.
[2] Containers: classifies receptacles that are commonly used to hold, store or carry materials (examples: dishes, cups and glasses, luggage, etc.)

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

## 3.4 Type of Event or Exposure

Type of event or exposure describes the incident or event that occurred at the time of the exposure that directly resulted in the injury or disease. The two most common types of events or exposures comprised more than two-thirds of the total lost-time claims from young workers in the last five years. Contact with objects and equipment accounted for 34.6% of all claims from young workers while bodily reaction and exertion represented 33.6% (see Table 3.4).

Among workers of all ages, contact with objects and equipment represented 25.5% of claims while injuries and diseases caused by bodily reaction and exertion were more common and accounted for 41.4% of all claims.

## Table 3.4
## Type of Event or Exposure - Young Workers, Alberta: 2001-2005

| Type of Event or Exposure | 2001 | 2002 | 2003 | 2004 | 2005 | Total Number | Total % |
|---|---|---|---|---|---|---|---|
| **Contact with Objects and Equipment** | **2,888** | **2,430** | **2,389** | **2,442** | **2,537** | **12,686** | **34.6%** |
| Struck by Object | 1,541 | 1,329 | 1,363 | 1,361 | 1,377 | 6,971 | **19.0%** |
| Caught in Object | 582 | 503 | 458 | 451 | 469 | 2,463 | **6.7%** |
| Struck against Object | 608 | 484 | 433 | 447 | 512 | 2,484 | **6.8%** |
| Rubbed or Abraded | 130 | 77 | 83 | 82 | 106 | 478 | **1.3%** |
| Other Contact with Object/Equipment | 27 | 37 | 52 | 101 | 73 | 290 | **0.8%** |
| **Bodily Reaction and Exertion** | **2,654** | **2,464** | **2,389** | **2,374** | **2,430** | **12,311** | **33.6%** |
| Overexertion | 1,734 | 1,463 | 1,392 | 1,383 | 1,431 | 7,403 | **20.2%** |
| Bodily Reaction [1] | 663 | 743 | 712 | 646 | 650 | 3,414 | **9.3%** |
| Repetitive Motion | 183 | 189 | 206 | 239 | 245 | 1,062 | **2.9%** |
| Other Bodily Reaction/Exertion | 74 | 69 | 79 | 106 | 104 | 432 | **1.2%** |
| **Falls** | **1,058** | **980** | **953** | **911** | **968** | **4,870** | **13.3%** |
| Fall on Same Level | 536 | 521 | 536 | 525 | 533 | 2,651 | **7.2%** |
| Fall to Lower Level | 403 | 354 | 345 | 306 | 330 | 1,738 | **4.7%** |
| Other Falls | 119 | 105 | 72 | 80 | 105 | 481 | **1.3%** |
| **Exposure to Harmful Substances** | **454** | **350** | **385** | **380** | **449** | **2,018** | **5.5%** |
| **Transportation Accidents** | **366** | **312** | **368** | **319** | **315** | **1,680** | **4.6%** |
| **Assaults and Violent Acts** | **75** | **79** | **88** | **76** | **87** | **405** | **1.1%** |
| Assaults and Violent Acts by Person(s) | 58 | 59 | 65 | 66 | 66 | 314 | **0.9%** |
| Other Assaults and Violent Acts | 17 | 20 | 23 | 10 | 21 | 91 | **0.2%** |
| **Type of Event - Unknown** | **632** | **741** | **431** | **427** | **372** | **2,603** | **7.1%** |
| **Fires and Explosions** | **8** | **6** | **20** | **17** | **15** | **66** | **0.2%** |
| **Total** | **8,135** | **7,362** | **7,023** | **6,946** | **7,173** | **36,639** | **100.0%** |

[1] Bodily reaction: injuries or illnesses resulting from a single incident of free bodily motion which imposed stress or strain on some part of the body.

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

## 3.5 Duration of Disability

Duration of disability[3] is intended to reflect the severity of the effects of occupational injury and disease as reflected by the number of days off work. However, the efforts of employers to introduce modified work programs to integrate injured workers more quickly back into the workforce can have a major impact on workdays lost.

Between 2001 and 2005, 64.0% of claims from young workers had duration of disability of ten days or less. Claims with one to five days duration represented 48.2% of all claims, and claims of six to ten days duration accounted for 15.8%. Nearly ten percent of all lost-time claims from young workers resulted in 51 days or more away from work (see Table 3.5).

Claims from workers of all ages were more likely to have a longer duration. Claims with one to five days duration represented 40.6% of all claims while claims with six to ten days duration accounted for 13.8%. Claims with duration of 51 days or more accounted for 17.9% of all claims from workers of all ages.

### Table 3.5
### Duration of Disability - Young Workers, Alberta: 2001-2005

| | | | | | | Total | |
|---|---|---|---|---|---|---|---|
| **Duration of Disability** | **2001** | **2002** | **2003** | **2004** | **2005** | **Number** | **%** |
| **1-5 days** | 3,829 | 3,416 | 3,372 | 3,408 | **3,634** | 17,659 | 48.2% |
| **6-10 days** | 1,361 | 1,203 | 1,092 | 1,053 | **1,078** | 5,787 | 15.8% |
| **11-15 days** | 652 | 559 | 569 | 522 | **535** | 2,837 | 7.7% |
| **16-20 days** | 368 | 336 | 296 | 308 | **338** | 1,646 | 4.5% |
| **21-30 days** | 470 | 432 | 392 | 432 | **400** | 2,126 | 5.8% |
| **31-40 days** | 286 | 278 | 259 | 262 | **263** | 1,348 | 3.7% |
| **41-50 days** | 224 | 229 | 193 | 194 | **167** | 1,007 | 2.7% |
| **51 days or more** | 833 | 802 | 713 | 579 | **554** | 3,481 | 9.5% |
| **Unspecified** | 112 | 107 | 137 | 188 | **204** | 748 | 2.0% |
| **Total** | **8,135** | **7,362** | **7,023** | **6,946** | **7,173** | **36,639** | **100.0%** |

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

[3] The duration of disability refers to the length of time, in days, for which the worker receives wage compensation from the WCB.

# OCCUPATIONAL FATALITIES

**In 2005, the WCB accepted nine fatalities from workers aged 15 to 24, accounting for 6.3% of all 143 fatalities in the province.**

A WCB accepted occupational fatality is defined as the death of a worker, resulting from a work-related incident or exposure, which has been accepted by the WCB for compensation. Some of the fatalities accepted in a particular year occurred in prior years. Unless otherwise specified, occupational fatalities in this report refer to occupational fatalities accepted by the WCB. The WCB classifies occupational fatalities into three general types:

## Motor Vehicle Incidents

Motor vehicle incidents typically involve non-industrial vehicles operating on public roads in which the fatally injured worker was either the driver or a passenger. This type of occupational fatality also includes cases involving aircraft crashes, train crashes, helicopter crashes and water vehicle crashes. In 2005, two of the young worker fatalities accepted by the WCB were motor vehicle incidents (see Table 4.0).

## Workplace Incidents

Workplace incidents consisted of cases in which the worker died at a worksite or as a result of injuries sustained at a worksite. This is the type of fatality that AHRE typically investigates. In 2005, the WCB accepted seven workplace incidents fatalities involving young workers (see Table 4.0).

## Occupational Disease

Occupational disease fatalities consist mostly of recognized occupational disease, that is, disease known to be primarily or exclusively work-related. This category also includes heart attacks suffered on the job. Occupational diseases are frequently diagnosed several years after the initial or crucial exposure to the toxic substance and in such cases, it is difficult to determine when the fatal exposure occurred. *The occupational disease category, therefore, should not be interpreted to reflect present worksite hazardous conditions or exposures.*

Each year the WCB accepts some occupational fatality claims for compensation. Occupational fatality claims that were accepted in a particular year may include fatalities from prior years. Between 2001 and 2005, there were no occupational disease fatalities

accepted by the WCB from young workers aged 15 to 24 (see Table 4.0).

**Table 4.0**
**Types of Occupational Fatalities Accepted by the WCB - Young Workers, Alberta: 2001-2005**

| | Motor Vehicle Incidents | | Workplace Incidents | | Total |
|---|---|---|---|---|---|
| Year | Number of Fatalities | % | Number of Fatalities | % | Number of Fatalities |
| 2001 | 7 | 77.8% | 2 | 22.2% | 9 |
| 2002 | 2 | 33.3% | 4 | 66.7% | 6 |
| 2003 | 6 | 75.0% | 2 | 25.0% | 8 |
| 2004 | 5 | 38.5% | 8 | 61.5% | 13 |
| **2005** | **2** | **22.2%** | **7** | **77.8%** | **9** |
| **Total** | **22** | **48.9%** | **23** | **51.1%** | **45** |

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

The WCB accepted 45 fatalities from workers aged 15 to 24 from 2001 to 2005. The Construction and Construction Trade Services sector had the most with 14 fatalities, followed by Mining and Petroleum Development sector with 13 fatalities. The Transportation, Communication and Utilities sector had nine fatalities over this period (see Table 4.1).

## Table 4.1
## Occupational Fatalities Accepted by the WCB by Industry Sector - Young Workers, Alberta: 2001-2005

| Industry Sector | Total Fatalities | % |
|---|---|---|
| Agriculture and Forestry | 1 | 2.2% |
| Mining and Petroleum Development | 13 | 28.9% |
| Manufacturing, Processing and Packaging | 4 | 8.9% |
| Construction and Construction Trade Services | 14 | 31.1% |
| Transportation, Communication and Utilities | 9 | 20.0% |
| Wholesale and Retail | 2 | 4.4% |
| Public Administration, Education and Health Services | 1 | 2.2% |
| Business, Personal and Professional Services | 1 | 2.2% |
| **Total** | **45** | **100.0%** |

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

From 2001 to 2005, young workers aged 20 to 24 accounted for 35 occupational fatalities while workers aged 15 to 19 accounted for 10 (see Table 4.2). In 2005, workers aged 20 to 24 represented 10.6% of those in employment in Alberta and accounted for 4.9% of all occupational fatalities. Workers aged 15 to 19 accounted for 6.9% of those in employment and represented 2.1% of all occupational fatalities in Alberta.

## Table 4.2
## Occupational Fatalities Accepted by the WCB by Age Group - Young Workers, Alberta: 2001-2005

| | Young Worker Fatalities | | |
|---|---|---|---|
| Year | 15-19 | 20-24 | 15-24 |
| 2001 | 3 | 6 | 9 |
| 2002 | 1 | 5 | 6 |
| 2003 | 1 | 7 | 8 |
| 2004 | 3 | 10 | 13 |
| **2005** | **2** | **7** | **9** |
| **Total** | **10** | **35** | **45** |

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

A

# APPENDIX A: TERMS, DEFINITIONS AND FORMULAS

**Lost-Time Claim**

A lost-time claim (LTC) is a claim for an occupational injury or disease that causes the worker to have time away from work, beyond the day of injury. Included are claims receiving reimbursement of full or partial lost wages due to occupational illness or injury, or payment for permanent loss of function.

**Duration (Days Lost)**

The duration of disability is the number of days following the injury or disease for which the worker was disabled and unable to perform normal work duties. This information is obtained for this report from data on compensation days paid on each claim from the WCB. Alberta Human Resources and Employment obtains these data on March 31 of the year following the claim year, and does not update the information, even though many injured workers continue to be disabled beyond this date. As a result, the duration information reported here underestimates the true impact of lost-time injury and disease.

**Cost of Claims**

Compensation cost of a claim is the reimbursement of full or partial lost wages that a worker received from the WCB due to occupational illness or injury.

**Industry Coverage**

About 75% of employed persons in Alberta are represented in this report. This report includes all industry activity in Alberta covered by the Alberta WCB for occupational injury and disease to workers. Most industry sectors are included but notable exceptions include agriculture and finance. Several professional groups (i.e. the teaching and medical professions) are also excluded. The Government of Canada is excluded except where the WCB pays administration or enhanced disability cost. Claims from Government of Alberta employees are only included if the duration is longer than 80 days.

**WCB Accepted Fatality**

An occupational fatality is the death of a worker which resulted from a work-related incident or exposure and which has been accepted by the WCB for compensation. A fatality is counted in the year it is accepted.

**NEC**

Means 'Not Elsewhere Classified'.

**UNS**

Means 'Unspecified'.

# CONTACT INFORMATION

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**Alberta Human Resources and Employment website:**

http://www.hre.gov.ab.ca/cps/rde/xchg/hre/hs.xsl/563.html

**Work Safe Alberta website:**

http://www3.gov.ab.ca/hre/whs/worksafely/index.asp

**Workplace Health and Safety Contact Centre:**

Telephone: 780-415-8690, toll free by calling 1-866-415-8690

http://www.hre.gov.ab.ca/cps/rde/xchg/hre/hs.xsl/2874.html

**Certificate of Recognition (COR) Program:**

http://www.hre.gov.ab.ca/cps/rde/xchg/hre/hs.xsl/277.html